

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 2, 6 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Harris US 6,535,582.

1.1 Regarding claim 2, Harris discloses voice verification system in figure 1, comprising:

an IVR 3 (communication terminal), said IVR comprises:

a user (communication party) identification section for collecting caller/user input (column 3, lines 28-38);

a transmission section (inherent) for transmitting the user identification and a received voice sample to a speaker verification server 2 (remote terminal) (column 3, lines 38-43; column 5, lines 17-19, 46-54);
and

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a reporting section that receives and reports a verification result transmitted from the speaker verification server 2 (column 3, lines 43-52); and said speaker verification server 2 comprises:

a storage section for storing a reference voiceprint for each of a plurality of users (column 3, lines 40-43);

a reception section (inherent) that receives user identification and voice sample transmitted from IVR (column 3, lines 38-43);

a verification section (inherent) that compares the received voice with a stored registration voice sample (column 3, lines 43-52); and

a transmission section (inherent) for transmitting the verification result to IVR 3 (column 3, lines 43-52).

1.2 Regarding claim 6, Harris teaches routing the user to an operator (column 3, lines 49-52)

1.3 Regarding claim 7, Harris teaches asking the user to try again if verification fails, and inherently, recording user's new voice sample and sending the recorded new voice sample to the speaker verification server 2 (column 3, lines 31-31, 49-50).

2. Claims 2 and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Brown et al. US 7,003,466.

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2.1 Regarding claim 2, Brown discloses voice verification system in figure 3, comprising:

a communication terminal 44 comprises:

a caller identification section for collecting caller input (column 9, 24-25, 60-63; column 11, lines 4-5, 39-43);

a transmission section (inherent) for transmitting the caller identification and a received voice sample to a third party (remote) terminal 46 (column 11, lines 4-5, 39-43); and

a reporting section that receives and reports a verification result transmitted from the third party terminal 46 (column 11, lines 11-17); and said third party terminal 46 comprises:

a storage section for storing a reference voiceprint for each of a plurality of users (column 11, lines 11-17, 44-47);

a reception section (inherent) that receives user identification and voice sample transmitted from the communication terminal 44 (column 11, lines 4-5, 11-16);

a verification section (inherent) that compares the received voice sample with a reference voiceprint (column 11, lines 11-16); and

a transmission section (inherent) for transmitting the verification result to the communication terminal 44 (column 11, lines 16-17).

2.2 Regarding claim 4, Brown discloses voice verification system in figure 3, comprising:

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a communication terminal 44 comprises:

a caller identification section for collecting caller input (column 9, 24-25, 60-63; column 11, lines 4-5, 39-43);

a transmission section (inherent) for transmitting the caller identification and a received voice sample to a third party (remote) terminal 46 (column 11, lines 4-5, 39-43; column 12, lines 37-39);

a reception section (inherent) for receiving a reference voice print of the caller transmitted from a third party (remote) terminal 46 (column 11, lines 32-38, 39-47);

a verification section (inherent) for verifying the received voice sample with the reference voiceprint transmitted from the third party terminal 46 (column 32-48); and

a reporting section that receives and reports a verification result (column 11, lines 37-38; column 9, lines 47-51);

and said third party terminal 46 comprises:

a storage section for storing a reference voiceprint for each of a plurality of users (column 11, lines 11-17, 44-47);

a reception section (inherent) that receives user identification and voice sample transmitted from the communication terminal 44 (column 11, lines 4-5, 11-16); and

a transmission section (inherent) for transmitting the reference voiceprint to the communication terminal 44 (column 11, lines 32-38).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. US 7,003,466 in view of Bergl et al. US 6,246,751.

Brown discloses a communication terminal 44 communicating with a third party (remote) terminal 46 in figure 3. Browns teaches receiving a voice utterance from a caller and the received voice utterance is then sent to the third party terminal 46, which stores a authenticated voice sample of the caller, for caller verification (column 11, lines 4-5, 11-16, 39-43). Brown further teaches storing the authenticated voice sample in the communication terminal 44 in figure 2 (column 10, lines 1-5). Brown fails to teach that the third party terminal 46 receives both the caller voice utterance and the authenticated voice sample from the communication device 44.

However, Bergle discloses a voice authentication system in figure 1 in that a biometric identification module 14 connected to LAN 16 and receives both a call voice utterance from a caller and an authenticated acoustic model of a call from database 12. The biometric identification module 14 then compares the voice utterance and the acoustic model and outputs the result of caller

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verification (column 3, lines 25-31; column 4, lines 40-44; column 5, lines 17019, 23-33).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Brown reference with the teaching of Bergl, so that third party terminal 46 would have received both call voice utterance authenticated voice sample from the communication terminal 44 for caller verification. The motivation for such a modification was to reduce storage requirement for third party terminal 46, because in the modified system, each communication terminal 44 would have stored only relatively few voice samples from a communication circle of its user, so that the third party terminal 46 would not have to keep a large database for all communication terminals.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harris US 6,535,582 in view of Hember US 5,633,934.

Harris teaches connecting the VIR 3 to the server 2 via a local area network (LAN), but is silent on data encryption and decryption.

However, Hember teaches encrypting and decrypting LAN traffic to secure sensitive information (column 1, lines 8-39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Harris reference with the teaching of Hember, so that information transferred between the IVR 3 and the server 2 would have been encrypted and decrypted. The motivation for such a modification was to secure the information as taught by Hember.

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Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) US 6,119,084 Roberts et al.

b) US 7,136,458 Zellner et al.

6. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Simon Sing whose telephone number is 571-272-7545. The examiner can normally be reached on Monday - Friday from 8:30 AM to 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang, can be reached at 571-272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

/Simon Sing/

Examiner, Art Unit 2614

04/09/2008